RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/634,262A_
Source: _1Fw16_
Date Processed by STIC: _12/10/04_

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/634,262A_   CRF Edit Date: _12/13/04_
                                 Edited by: ___

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

____ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

_✓_ Inserted mandatory headings/numeric identifiers, specifically:

Sequence 37 - Inserted <220> above <221>

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

_✓_ Other: _corrected <141> and <151> responses_

_____
_____

‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖

IFW16

RAW SEQUENCE LISTING   DATE: 12/13/2004
PATENT APPLICATION: US/10/634,262A   TIME: 16:07:07

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\12132004\J634262A.raw**

```
      3 <110> APPLICANT: Myers, Alan M.
      4         James, Martha G.
W-->  5 <120> TITLE OF INVENTION: dull1 Coding for a Novel Starch Synthase and Uses
W-->  6       Thereof
W-->  7 <130> FILE REFERENCE: ISU-003BX
W-->  8 <140> CURRENT APPLICATION NUMBER: US 10/634,262A
      9 <141> CURRENT FILING DATE: 2003-08-05
     10 <150> PRIOR APPLICATION NUMBER: US 09/554,467
     11 <151> PRIOR FILING DATE: 2000-05-12
W--> 12 <160> NUMBER OF SEQ ID: 37
     14 <210> SEQ ID NO: 1
     15 <211> LENGTH: 6027
     16 <212> TYPE: DNA
     17 <213> ORGANISM: maize
W--> 18 <220> FEATURE:
     19 <223> OTHER INFORMATION: cDNA sequence corresponding to the gene encoding the
     20       starch synthase enzyme DU1.
W--> 21 <400> SEQUENCE: 1
     23 gaattcccta gttcagagaa agaaagaagt tgagaatgag aagcaagtga ggcgcgtttg   60
     24 ctgggaagtg gttcttgtga ggtttaggag ttcacccttc ttttcttccc cttctagaaa  120
     25 tggagatggt cctacggtcg cagagccctc tctgccttcg gagtgggccg gtgctcattt  180
     26 ttcgaccaac cgtcgcgggc ggaggagggg gcactcagtc tttgttgagg actaccagat  240
     27 ttgcgagaag aagggtcatt cgatgcgttg tagcaagtcc aggttgtcct aataggaaat  300
     28 ctaggacagc gtctcccaac gtaaaagtag ctgcttatag caactatgcg ccaagactcc  360
     29 tcgttgagtc aagctccaag aagagcgaac accatgatag cagcagacac cgtgaagaaa  420
     30 ctattgatac atacaatggg ctgtcaggtt ctgatgcagc agaattgaca agtaatagag  480
     31 atgtagaaat tgaagtggat ttgcagcaca tttctgagga ggaattgcca ggaaaagtat  540
     32 cgattaatgc atcattagga gaaatggaaa cagtggatga agctgaggtc gaggaggata  600
     33 agtttgaggt agatacctca ggaattgtat tgcgcaatgt tgcagttcgg gaagtggatc  660
     34 caaaggatga acataatgct aaagatgtat ttgtggtaga ttcgtcagga actgcaccag  720
     35 ataatgctgc agtggaggaa gtggtagatg aagctgaggt tgaagaggat atggttgatg  780
     36 tggatatctt gggacttgac ttgaataatg caacgatcga ggaaattgat ttgatggaag  840
     37 aggctttact ggagaacttc gacgtggatt caccaggcaa tgcttctagt ggtcgaacct  900
     38 atggggggtgt ggatgagttg ggtgagctgc cttcaacatc cgtggattgc atcgccatta  960
     39 acggaaaacg tagaagtttg aagcctaagc ccttgccaat tgtcaggttc caggaacaag 1020
     40 aacagatagt tttaagcatt gttgacgaag aagggttgat tgctagttca tgtgaagaag 1080
     41 gccaaccggt ggtagattac dataagcaag aggaaaactc taccgctttc gatgaacaga 1140
     42 agcaattaac tgatgatttc cctgaagaag gcatatctat agttcacttc cctgagccaa 1200
     43 acaatgatat tgttggatcc tcaaaattct tggagcaaaa acaagaattg gatggttctt 1260
     44 ataaacaaga tcgatcaacc actggattgc atgaacaaga tcagtctgtt gttagttcac 1320
     45 acggacaaga taaatcaatt gttggtgtgc ctcagcaaat ccagtacaat gatcaatcta 1380
     46 ttgctggttc tcatagacaa gatcaatcaa ttgccggtgc acctgagcaa atccaatccg 1440
     47 ttgctggcta tataaaacca aatcaatcta ttgttggttc ttgtaaacaa catgaattga 1500
```

```
48 ttattcctga gcctaagaaa atcgaatcca tcatcagtta caatgaaata gatcaatcta 1560
49 ttgttggttc tcacaaacaa gacaaatctg ttgttagtgt gcctgagcaa atccaatcca 1620
50 ttgttagtca cagcaaacca aatcaatcta ctgttgattc ttatagacaa gctgaatcaa 1680
51 ttattggtgt gcctgagaaa gtccaatcca tcaccagtta cgataaacta gaccagtcca 1740
52 ttgttggttc tcttaaacaa gatgagccta ttattagcgt gcctgagaaa atccaatcca 1800
53 ttgtccatta cactaaacca aatcagtcta ttgttggctt gcccaaacaa caacaatcaa 1860
54 ttgttcatat cgttgaacca aaacagtcca tagatggttt ccctaaacaa gatctatcaa 1920
55 tcgttggtat ctccaatgag tttcaaacaa agcaactggc tactgttggg actcatgatg 1980
56 gattgcttat gaagggtgtg gaagctaagg agacatctca aaagactgaa ggggatacac 2040
57 ttcaggcaac gttcaatgtc gacaacttgt cacagaaaca ggaaggctta actaaagaag 2100
58 cagacgagat aacaattatt gagaaaatca atgatgaaga ccttgtgatg attgaagaac 2160
59 agaaaagcat agccatgaat gaagaacaga cgattgttac cgaagaagac attccaatgg 2220
60 ctaaggttga dataggaatt gacaaggcca aattttaca tctgctttct gaagaagaga 2280
61 gttcatggga tgaaaatgaa gtgggaataa ttgaggctga tgaacagtat gaagtcgatg 2340
62 agacatctat gtccactgaa caagatatcc aggaatcacc taatgatgat ttggatccac 2400
63 aagcactatg gagtatgctt caagagcttg ctgaaaaaaa ttattcgctg ggaaacaagt 2460
64 tgtttactta tccagatgta ttgaaagctg attcaacaat tgatctctat ttcaatcgtg 2520
65 atctatcagc tgtggccaat gagcctgatg tacttatcaa aggagcattc aatgggtgga 2580
66 agtggagatt tttcactgaa aaattgcaca agagcgagct ggcaggggac tggtggtgct 2640
67 gcaaactata cattcctaag caggcataca gaatggactt tgtgtttttt aacggacaca 2700
68 cggtatatga aaataataac aataatgatt tcgtgataca aatagaaagc accatggatg 2760
69 aaaatttatt tgaggatttc ttggctgaag aaaagcaacg agaacttgag aaccttgcaa 2820
70 atgaggaagc tgaaaggagg agacaaactg atgagcagcg gcgaatggag gaagaaaggg 2880
71 ccgcagataa agctgacagg gtacaagcca aggttgaggt agagacgaag aagaataaat 2940
72 tgtgcaatgt attgggttta gccagagctc ctgttgataa tttatggtac attgagccca 3000
73 tcacgactgg acaagaggct actgtcagat tgtattataa cataaactca agacctctag 3060
74 ttcacagtac tgagatatgg atgcatggtg gctataacaa ttggattgat ggactctctt 3120
75 ttgctgaaag gcttgttcat catcatgaca aagattgtga ttggtggttt gcagatgttg 3180
76 tcgtgcctga aagaacatat gtattggact gggttttttgc tgacggccca ccagggagtg 3240
77 caaggaatta tgacaacaat ggaggacatg attttcatgc tacccttcca aataacatga 3300
78 ctgaggaaga gtattggatg gaagaagaac aaaggatcta tacaaggctt caacaagaga 3360
79 ggagggaaag ggaggaggct attaaaagga aggctgagag aaatgcaaaa atgaaagctg 3420
80 agatgaagga aaagactatg agaatgttcc tggtttctca gaaacacatt gtttacaccg 3480
81 aaccacttga aatacatgct ggaactacta ttgatgtgct ttataatcct tctaatacag 3540
82 ttctaactgg aaagccagag gtttggtttc gatgttcctt taatcgttgg atgtatccag 3600
83 gtgggggtgtt gccacctcag aagatggtac aagcagaaaa tggttcacac ctaaaagcaa 3660
84 cagtttacgt tccacgagat gcctatatga tggacttcgt tttctcggag tcagaagaag 3720
85 gtggaatttta tgataacaga aatgggttag actatcatat tcctgttttt gggtcaattg 3780
86 caaaggaacc acctatgcac attgtccaca ttgctgttga gatggcacca atcgcaaagg 3840
87 ttggaggtct tggtgatgtt gtcactagtc tttcacgtgc tgtgcaagat ttaggacaca 3900
88 atgtggaggt tattcttcca aagtacggtt gcttgaatct aagcaatgtc aagaatctac 3960
89 aaatccatca gagttttttct tggggtggtt ctgaaataaa tgtgtggcgt ggactagtcg 4020
90 aaggcctttg tgtttacttc ctggaacctc aaaatgggat gtttggagtc ggatatgtat 4080
91 atggcaggga cgatgaccgc cgatttggct tcttctgtcg ttctgctcta gagtttctcc 4140
92 tccaaagtgg atcttctccg aacataatac attgccatga ttggtcaagt gctcctgttg 4200
93 cctggctaca caaggaaaac tacgcgaagt ctagcttggc aaacgcacgg gtggtattca 4260
94 ccatccacaa tcttgaattt ggagcgcatc atattggcaa agcaatgaga tattgtgata 4320
95 aagcaacaac tgtctctaat acatattcaa aggaagtgtc aggtcatggt gccatagttc 4380
96 ctcatcttgg gaaattctat ggcattctca atggaattga tccggatata tgggatccgt 4440
```

```
RAW SEQUENCE LISTING              DATE: 12/13/2004
PATENT APPLICATION:  US/10/634,262A     TIME: 16:07:07

         Input Set : A:\PTO.AMC.txt
         Output Set: N:\CRF4\12132004\J634262A.raw
```

```
 97 acaatgacaa ctttatcccg gtccactaca cttgtgagaa tgtggttgaa ggcaagaggg 4500
 98 ctgctaagag ggcactgcag cagaagtttg ggttacagca aatcgatgtc cccgtcgtag 4560
 99 gaatcgtcac tcgcctgaca gcccaaaagg ggatccacct gatcaagcat gcgattcacc 4620
100 gtacactcga acggaacgga caggtggttt tgcttggttc agcgccggac tctcgaatcc 4680
101 aagctgattt tgtcaacctg gcgaatacgc tccacggcgt aaaccatggg caagtgaggc 4740
102 tttccttgac ctacgacgag cctctctcgc atctgatata cgctggctct gacttcattc 4800
103 tggtcccatc tatatttgag ccttgcggcc taactcagct cgtcgccatg cggtatggaa 4860
104 ccatcccgat tgtccgcaag actggagggc tcttcgacac tgtcttcgat gtggacaatg 4920
105 acaaggaacg agcccgagat cgaggccttg agcccaacgg gtttagcttt gacggagctg 4980
106 atagcaacgg tgttgactac gcgctgaaca gggcgatctc agcttggttc gatgcccgga 5040
107 gctggttcca ctcccttttgc aagagagtca tggagcagga ctggtcgtgg aaccgacctg 5100
108 ccctcgacta catcgagctc taccgttcag cgtccaaatt gtaataatcc aaacaacggc 5160
109 caatgtagtg tgttgtctgc aggtctcaga tgcagccatt cagcttttgc aggttcctgg 5220
110 gcattgctgt acagcctcct tgtctttagt tagctccatt ccccgaggag cacagtgcaa 5280
111 ttttttatcc tcagttatta tgcatagatt gtctcagtag aatgctttct tcgggcatgt 5340
112 atgtttgttt cctctgttgt tgaattctgg tgttaagtcg cgtataggaa tctacaggaa 5400
113 atgaaaaagt ccatttcctg cgtcaacctt ttagggctac catgcacatg agacctttca 5460
114 agtgcaaaga atattaggac tagactacta gtatgtgaac tctattttttc caagagattt 5520
115 caatttttcc aatgaaaaat aaactaattt ttcttggaaa aatggaaatc ccttggaaaa 5580
116 atggggttcc caaactagcc cgtagagtat agatcataga attggtctag tggttcctcg 5640
117 agagagaaaa aaacatagac ttttcttgtc atatgcttat ttaagtttat tttgtacaaa 5700
118 ctttgagaac cttcaaaaac accccaatgg ctggttaagt gaccagggaa ataaagagga 5760
119 tctataggga ggaatccccc gcctctctct cacagatgtt gcctagcacc ggccagcctc 5820
120 atccgtccag tggaattaag gttggttgcg acgacagccc atcaatggaa accaacctcg 5880
121 tgccccgtgc cgggatctac cttccttcct caccaccacg ccgatctcac cttccatagg 5940
122 agcttcctat gcactgttac ctattatagg tacatgacat tgtacatctt tgtatgaact 6000
123 tacatcaatg ccaaaaatcc ggaattc                                    6027
125 <210> SEQ ID NO: 2
126 <211> LENGTH: 21
127 <212> TYPE: DNA
128 <213> ORGANISM: artificial sequence
```
W--> 129 **<220> FEATURE:**
```
130 <221> NAME/KEY: primer_bind
131 <223> OTHER INFORMATION: Primer du1-sp1 used to amplify fragment F500 from pJW3
```
W--> 132 **<400> SEQUENCE: 2**
```
133 gtacaatgac aactttatcc c                    21
135 <210> SEQ ID NO: 3
136 <211> LENGTH: 23
137 <212> TYPE: DNA
138 <213> ORGANISM: artificial sequence
```
W--> 139 **<220> FEATURE:**
```
140 <221> NAME/KEY: primer_bind
141 <223> OTHER INFORMATION: Primer du1-sp2 used to amplify fragment F500 from pJW3
```
W--> 142 **<400> SEQUENCE: 3**
```
143 cattctcaca agtgtagtgg acc                   23
145 <210> SEQ ID NO: 4
146 <211> LENGTH: 20
147 <212> TYPE: DNA
148 <213> ORGANISM: artificial sequence
```

```
W--> 149 <220> FEATURE:
    150 <221> NAME/KEY: primer_bind
    151 <223> OTHER INFORMATION: Primer du1-sp4 used to amplify cloned BamHI fragment.
W--> 152 <400> SEQUENCE: 4
    153 gtcgtaggaa tcgtcactcg                20
    155 <210> SEQ ID NO: 5
    156 <211> LENGTH: 20
    157 <212> TYPE: DNA
    158 <213> ORGANISM: artificial sequence
W--> 159 <220> FEATURE:
    160 <221> NAME/KEY: primer_bind
    161 <223> OTHER INFORMATION: (1030 primer located 19 bp proximal to EcoRI cloning
    162       site in the left arm in (gt11 phage DNA used to
    163       amplify cDNA inserts
W--> 164 <400> SEQUENCE: 5
    165 attggtggcg acgactcctg                20
    167 <210> SEQ ID NO: 6
    168 <211> LENGTH: 20
    169 <212> TYPE: DNA
    170 <213> ORGANISM: artificial sequence
W--> 171 <220> FEATURE:
    172 <221> NAME/KEY: primer_bind
    173 <223> OTHER INFORMATION: (1356 primer located 281 bp distal to EcoRI cloning
    174       site in the LacZ' region in the right arm in (gt11
    175       phage DNA used to amplify cDNA inserts.
W--> 176 <400> SEQUENCE: 6
    177 gtgtgggggt gatggcttcc                20
    179 <210> SEQ ID NO: 7
    180 <211> LENGTH: 20
    181 <212> TYPE: DNA
    182 <213> ORGANISM: artificial sequence
W--> 183 <220> FEATURE:
    184 <221> NAME/KEY: primer_bind
    185 <223> OTHER INFORMATION: Primer du-F3 used to amplify Du1 mRNA
W--> 186 <400> SEQUENCE: 7
    187 ataaatgtgt ggcgtggact                20
    189 <210> SEQ ID NO: 8
    190 <211> LENGTH: 20
    191 <212> TYPE: DNA
    192 <213> ORGANISM: artificial sequence
W--> 193 <220> FEATURE:
    194 <221> NAME/KEY: primer_bind
    195 <223> OTHER INFORMATION: Primer du-R1 used to amplify Du1 mRNA
W--> 196 <400> SEQUENCE: 8
    197 cgttccttgt cattgtccac                20
    198 <210> SEQ ID NO: 9
    199 <211> LENGTH: 6
    200 <212> TYPE: PRT
    201 <213> ORGANISM: maize
```

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/10/634,262A**

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\12132004\J634262A.raw**

W--> 202 <220> **FEATURE:**
203 <222> LOCATION: REPEAT
204 <223> OTHER INFORMATION: Six residue M-box sequence in first half- repeat of ten
205   residue sequence of SBE-repeat in DU1.
W--> 206 <400> **SEQUENCE: 9**
207 Asp Gln Ser Ile Val Gly
208 1   5
210 <210> SEQ ID NO: 10
211 <211> LENGTH: 4
212 <212> TYPE: PRT
213 <213> ORGANISM: maize
W--> 214 <220> **FEATURE:**
215 <222> LOCATION: REPEAT
216 <223> OTHER INFORMATION: Four residue sequence of second half-repeat of
217   ten residue SBE-repeat sequence in DU1.
W--> 218 <400> **SEQUENCE: 10**
219 Ser His Lys Gln
220 1
222 <210> SEQ ID NO: 11
223 <211> LENGTH: 6
224 <212> TYPE: PRT
225 <213> ORGANISM: unknown
W--> 226 <220> **FEATURE:**
227 <222> LOCATION: REPEAT
228 <223> OTHER INFORMATION: M-box sequence in SBEI enzyme.
W--> 229 <400> **SEQUENCE: 11**
230 Asp Gln Ala Leu Val Gly
231 1   5
233 <210> SEQ ID NO: 12
234 <211> LENGTH: 1674
235 <212> TYPE: PRT
236 <213> ORGANISM: maize
W--> 237 <220> **FEATURE:**
238 <223> OTHER INFORMATION: Deduced amino acid sequence of starch synthase DU1.
W--> 239 <400> **SEQUENCE: 12**
240 Met Glu Met Val Leu Arg Ser Gln Ser Pro Leu Cys Leu Arg Ser
241 1   5   10   15
243 Gly Pro Val Leu Ile Phe Arg Pro Thr Val Ala Gly Gly Gly Gly
244   20   25   30
246 Gly Thr Gln Ser Leu Leu Arg Thr Thr Arg Phe Ala Arg Arg Arg
247   35   40   45
249 Val Ile Arg Cys Val Val Ala Ser Pro Gly Cys Pro Asn Arg Lys
250   50   55   60
252 Ser Arg Thr Ala Ser Pro Asn Val Lys Val Ala Ala Tyr Ser Asn
253   65   70   75
255 Tyr Ala Pro Arg Leu Leu Val Glu Ser Ser Ser Lys Lys Ser Glu
256   80   85   90
259 His His Asp Ser Ser Arg His Arg Glu Glu Thr Ile Asp Thr Tyr
260   95   100   105

VERIFICATION SUMMARY   DATE: 12/13/2004
PATENT APPLICATION: US/10/634,262A   TIME: 16:07:08

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\12132004\J634262A.raw

L:5 M:283 W: Missing Blank Line separator, <120> field identifier
L:7 M:283 W: Missing Blank Line separator, <130> field identifier
L:8 M:283 W: Missing Blank Line separator, <140> field identifier
L:12 M:283 W: Missing Blank Line separator, <160> field identifier
L:18 M:283 W: Missing Blank Line separator, <220> field identifier
L:21 M:283 W: Missing Blank Line separator, <400> field identifier
L:129 M:283 W: Missing Blank Line separator, <220> field identifier
L:132 M:283 W: Missing Blank Line separator, <400> field identifier
L:139 M:283 W: Missing Blank Line separator, <220> field identifier
L:142 M:283 W: Missing Blank Line separator, <400> field identifier
L:149 M:283 W: Missing Blank Line separator, <220> field identifier
L:152 M:283 W: Missing Blank Line separator, <400> field identifier
L:159 M:283 W: Missing Blank Line separator, <220> field identifier
L:164 M:283 W: Missing Blank Line separator, <400> field identifier
L:171 M:283 W: Missing Blank Line separator, <220> field identifier
L:176 M:283 W: Missing Blank Line separator, <400> field identifier
L:183 M:283 W: Missing Blank Line separator, <220> field identifier
L:186 M:283 W: Missing Blank Line separator, <400> field identifier
L:193 M:283 W: Missing Blank Line separator, <220> field identifier
L:196 M:283 W: Missing Blank Line separator, <400> field identifier
L:202 M:283 W: Missing Blank Line separator, <220> field identifier
L:206 M:283 W: Missing Blank Line separator, '<400> field identifier
L:214 M:283 W: Missing Blank Line separator, <220> field identifier
L:218 M:283 W: Missing Blank Line separator, <400> field identifier
L:226 M:283 W: Missing Blank Line separator, <220> field identifier
L:229 M:283 W: Missing Blank Line separator, <400> field identifier
L:237 M:283 W: Missing Blank Line separator, <220> field identifier
L:239 M:283 W: Missing Blank Line separator, <400> field identifier
L:588 M:283 W: Missing Blank Line separator, <220> field identifier
L:589 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:593 M:283 W: Missing Blank Line separator, <400> field identifier
L:610 M:283 W: Missing Blank Line separator, <220> field identifier
L:612 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:612 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14
L:615 M:283 W: Missing Blank Line separator, <400> field identifier
L:632 M:283 W: Missing Blank Line separator, <220> field identifier
L:634 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:634 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:637 M:283 W: Missing Blank Line separator, <400> field identifier
L:653 M:283 W: Missing Blank Line separator, <220> field identifier
L:654 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:657 M:283 W: Missing Blank Line separator, <400> field identifier
L:664 M:283 W: Missing Blank Line separator, <220> field identifier
L:665 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:668 M:283 W: Missing Blank Line separator, <400> field identifier
L:675 M:283 W: Missing Blank Line separator, <220> field identifier
L:676 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18
L:679 M:283 W: Missing Blank Line separator, <400> field identifier

VERIFICATION SUMMARY   DATE: 12/13/2004
PATENT APPLICATION: **US/10/634,262A**   TIME: 16:07:08

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\12132004\J634262A.raw**

```
L:687  M:283 W: Missing Blank Line separator, <220> field identifier
L:688  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:691  M:283 W: Missing Blank Line separator, <400> field identifier
L:699  M:283 W: Missing Blank Line separator, <220> field identifier
L:700  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20
L:703  M:283 W: Missing Blank Line separator, <400> field identifier
L:711  M:283 W: Missing Blank Line separator, <220> field identifier
L:712  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:21
L:715  M:283 W: Missing Blank Line separator, <400> field identifier
L:723  M:283 W: Missing Blank Line separator, <220> field identifier
L:724  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:22
L:727  M:283 W: Missing Blank Line separator, <400> field identifier
L:735  M:283 W: Missing Blank Line separator, <220> field identifier
L:736  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:739  M:283 W: Missing Blank Line separator, <400> field identifier
L:748  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24
L:763  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25
L:778  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:26
L:793  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27
L:808  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:28
L:820  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:29
L:834  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:30
L:849  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:865  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:32
L:881  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:33
L:897  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:34
L:1183 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:37
```

IFW16

RAW SEQUENCE LISTING   DATE: 12/10/2004
PATENT APPLICATION: US/10/634,262A   TIME: 10:51:32

Input Set : **A:\ISU-003AX Seq.txt**
Output Set: **N:\CRF4\12102004\J634262A.raw**

```
        3 <110> APPLICANT: Myers, Alan M.
        4         James, Martha G.
W-->    5 <120> TITLE OF INVENTION: dull1 Coding for a Novel Starch Synthase and Uses
W-->    6        Thereof
W-->    7 <130> FILE REFERENCE: ISU-003BX
W-->    8 <140> CURRENT APPLICATION NUMBER: US 10/634,262A
        9 <141> CURRENT FILING DATE: (2003-8-5) 2003-08-05
       10 <150> PRIOR APPLICATION NUMBER: US 09/554,467
W-->   11 <151> PRIOR FILING DATE: (2000-5-12) 2000-05-12
W-->   12 <160> NUMBER OF SEQ ID: 37
```

ERRORED SEQUENCES

```
     1178 <210> SEQ ID NO: 37
     1179 <211> LENGTH: 32
     1180 <212> TYPE: DNA
     1181 <213> ORGANISM: artificial sequence
W--> 1182 <221> NAME/KEY: primer
W--> 1183 <220> FEATURE:
     1183 <223> OTHER INFORMATION: Primer containing restriction sites
E--> 1184 <400> SEQUENCE: 37
     1185 aaacccgggaattcgatggagatggtcctacg                              32
```

Does Not Comply
Corrected Diskette Needed

insert
a <220> above <221> line

VERIFICATION SUMMARY   DATE: 12/10/2004
PATENT APPLICATION: US/10/634,262A   TIME: 10:51:33

Input Set : **A:\ISU-003AX Seq.txt**
Output Set: **N:\CRF4\12102004\J634262A.raw**

```
L:5 M:283 W: Missing Blank Line separator, <120> field identifier
L:7 M:283 W: Missing Blank Line separator, <130> field identifier
L:8 M:283 W: Missing Blank Line separator, <140> field identifier
L:9 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD
L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:12 M:283 W: Missing Blank Line separator, <160> field identifier
L:18 M:283 W: Missing Blank Line separator, <220> field identifier
L:21 M:283 W: Missing Blank Line separator, <400> field identifier
L:129 M:283 W: Missing Blank Line separator, <220> field identifier
L:132 M:283 W: Missing Blank Line separator, <400> field identifier
L:139 M:283 W: Missing Blank Line separator, <220> field identifier
L:142 M:283 W: Missing Blank Line separator, <400> field identifier
L:149 M:283 W: Missing Blank Line separator, <220> field identifier
L:152 M:283 W: Missing Blank Line separator, <400> field identifier
L:159 M:283 W: Missing Blank Line separator, <220> field identifier
L:164 M:283 W: Missing Blank Line separator, <400> field identifier
L:171 M:283 W: Missing Blank Line separator, <220> field identifier
L:176 M:283 W: Missing Blank Line separator, <400> field identifier
L:183 M:283 W: Missing Blank Line separator, <220> field identifier
L:186 M:283 W: Missing Blank Line separator, <400> field identifier
L:193 M:283 W: Missing Blank Line separator, <220> field identifier
L:196 M:283 W: Missing Blank Line separator, <400> field identifier
L:202 M:283 W: Missing Blank Line separator, <220> field identifier
L:206 M:283 W: Missing Blank Line separator, <400> field identifier
L:214 M:283 W: Missing Blank Line separator, <220> field identifier
L:218 M:283 W: Missing Blank Line separator, <400> field identifier
L:226 M:283 W: Missing Blank Line separator, <220> field identifier
L:229 M:283 W: Missing Blank Line separator, <400> field identifier
L:237 M:283 W: Missing Blank Line separator, <220> field identifier
L:239 M:283 W: Missing Blank Line separator, <400> field identifier
L:588 M:283 W: Missing Blank Line separator, <220> field identifier
L:589 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:593 M:283 W: Missing Blank Line separator, <400> field identifier
L:610 M:283 W: Missing Blank Line separator, <220> field identifier
L:612 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:612 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14
L:615 M:283 W: Missing Blank Line separator, <400> field identifier
L:632 M:283 W: Missing Blank Line separator, <220> field identifier
L:634 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:634 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:637 M:283 W: Missing Blank Line separator, <400> field identifier
L:653 M:283 W: Missing Blank Line separator, <220> field identifier
L:654 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:657 M:283 W: Missing Blank Line separator, <400> field identifier
L:664 M:283 W: Missing Blank Line separator, <220> field identifier
L:665 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:668 M:283 W: Missing Blank Line separator, <400> field identifier
L:675 M:283 W: Missing Blank Line separator, <220> field identifier
```

VERIFICATION SUMMARY   DATE: 12/10/2004
PATENT APPLICATION: US/10/634,262A   TIME: 10:51:33

Input Set : A:\ISU-003AX Seq.txt
Output Set: N:\CRF4\12102004\J634262A.raw

```
L:676 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18
L:679 M:283 W: Missing Blank Line separator, <400> field identifier
L:687 M:283 W: Missing Blank Line separator, <220> field identifier
L:688 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:691 M:283 W: Missing Blank Line separator, <400> field identifier
L:699 M:283 W: Missing Blank Line separator, <220> field identifier
L:700 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20
L:703 M:283 W: Missing Blank Line separator, <400> field identifier
L:711 M:283 W: Missing Blank Line separator, <220> field identifier
L:712 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:21
L:715 M:283 W: Missing Blank Line separator, <400> field identifier
L:723 M:283 W: Missing Blank Line separator, <220> field identifier
L:724 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:22
L:727 M:283 W: Missing Blank Line separator, <400> field identifier
L:735 M:283 W: Missing Blank Line separator, <220> field identifier
L:736 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:739 M:283 W: Missing Blank Line separator, <400> field identifier
L:748 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24
L:763 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25
L:778 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:26
L:793 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27
L:808 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:28
L:820 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:29
L:834 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:30
L:849 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:865 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:32
L:881 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:33
L:897 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:34
L:1182 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:37
L:1183 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:37
L:1184 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:37
```